

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: IRiS

Report Number: P1311665

Luminaire Tested: P3SQAS20R459050D010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1311665
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-84)
Test Lab: INNOVATION CENTER
Issue Date: 1/29/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3SQAS20R459050D010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R45 optic, 5000K CCT AND, 90CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

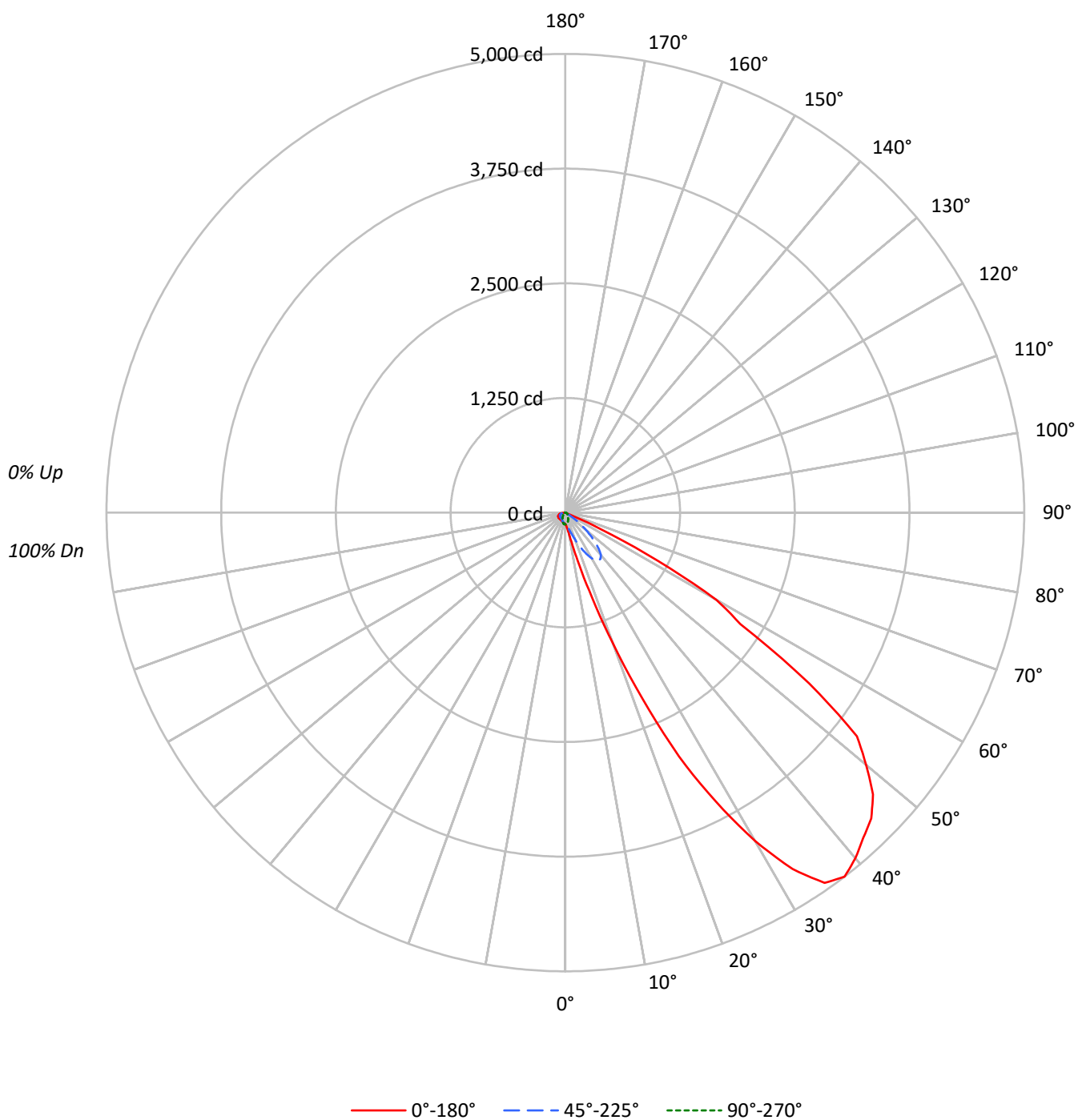
Lumens per Lamp: N/A
Luminaire Lumens: 2234.0 lumens
Efficiency: N/A
Efficacy: 77.6 lumens/watt
Spacing Criteria (0/90/45): 3.81 / 0.82 / 1.83
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 28.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20			
RC	80				70				50				30				10			0
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50	30	10	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	110	106	102	99	107	104	100	97	99	97	94		96	93	91		92	90	88	86
2	100	93	86	81	98	91	85	80	87	83	78		84	80	77		81	78	75	73
3	91	81	73	67	89	80	72	66	77	70	65		74	69	64		71	67	63	61
4	83	71	62	56	81	70	62	55	67	60	55		65	59	54		63	58	53	51
5	76	63	53	47	73	61	53	46	59	52	46		57	51	45		55	50	45	43
6	69	55	46	39	67	54	46	39	52	45	39		51	44	39		49	43	38	36
7	63	49	40	34	61	48	40	33	47	39	33		45	38	33		44	37	33	31
8	58	44	35	29	56	43	35	29	42	34	29		40	33	28		39	33	28	26
9	53	39	31	25	52	39	30	25	38	30	25		36	29	25		35	29	24	22
10	49	36	27	22	48	35	27	22	34	27	21		33	26	21		32	26	21	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	22251	22251	22251	22251	22251
5°	26485	24566	22025	20417	20417
10°	42286	28733	20653	19377	19377
15°	105321	38512	18757	18097	18757
20°	277406	57512	16238	17246	18273
25°	557025	85246	14024	16133	17882
30°	821176	114169	11375	15790	18355
35°	1035814	133884	9692	15516	19006
40°	1105129	135297	8723	16187	20324
45°	1148237	112841	8086	17536	22018
50°	1146423	78638	7904	18782	24730
55°	974377	34920	8317	21048	27144
60°	654894	6992	8267	23526	31138
65°	173764	3016	8273	25592	35372
70°	4633	3726	8359	27896	39981
75°	3660	3660	8584	29478	45448
80°	3670	5455	9124	31142	51276
85°	3557	7311	14623	32802	50982

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 10°

Vertical Angle: 47.5°

Luminance: 1177815 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	12.8	0.6
10°-20°	63.0	2.8
20°-30°	259.9	11.6
30°-40°	547.7	24.5
40°-50°	675.7	30.2
50°-60°	506.5	22.7
60°-70°	130.3	5.8
70°-80°	27.0	1.2
80°-90°	11.0	0.5
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	335.7	15.0
0°-40°	883.4	39.5
0°-60°	2065.7	92.5
0°-90°	2234.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2234.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	129	129	129	129	129	
5°	153	142	127	118	118	17
15°	591	216	105	102	105	216
25°	2931	449	74	85	94	1366
35°	4927	637	46	74	90	3002
45°	4714	463	33	72	90	3608
55°	3245	116	28	70	90	2802
65°	426	7	20	63	87	615
75°	6	6	13	44	68	7
85°	2	4	7	17	26	2
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
0°	129.2	129.2	129.2	129.2	129.2	129.2	129.2	129.2	129.2	129.2	129.2
2.5°	136.6	136.6	136.6	136.6	136.6	136.6	136.6	134.8	132.9	129.2	125.5
5°	153.2	151.4	151.4	151.4	149.5	147.7	147.7	142.1	134.8	127.4	121.8
7.5°	180.9	180.9	179.1	175.4	173.5	169.8	166.1	151.4	134.8	123.7	116.3
10°	241.8	238.1	232.6	228.9	219.7	206.7	197.5	164.3	132.9	118.1	112.6
12.5°	361.8	369.2	350.7	332.3	306.4	282.4	252.9	186.4	132.9	112.6	107.1
15°	590.7	603.6	568.5	531.6	468.9	409.8	354.4	216.0	129.2	105.2	99.7
17.5°	965.4	982.0	923.0	836.2	738.4	620.2	518.7	256.6	125.5	97.8	94.1
20°	1513.6	1511.8	1397.3	1288.4	1100.2	926.6	736.5	313.8	120.0	88.6	88.6
22.5°	2187.4	2194.8	2054.5	1858.8	1591.2	1312.4	1009.7	380.3	112.6	81.2	83.1
25°	2931.3	2868.5	2702.4	2464.3	2122.8	1737.0	1338.3	448.6	105.2	73.8	77.5
27.5°	3551.5	3490.6	3300.5	3018.0	2650.7	2192.9	1672.4	516.9	96.0	66.5	72.0
30°	4129.3	4051.8	3822.9	3503.5	3066.0	2571.3	1986.2	574.1	84.9	57.2	66.5
32.5°	4605.5	4535.4	4275.1	3904.1	3427.8	2896.2	2252.0	618.4	73.8	51.7	62.8
35°	4926.7	4854.7	4614.8	4206.8	3688.1	3132.5	2468.0	636.8	64.6	46.1	60.9
37.5°	5000.5	4961.8	4790.1	4408.0	3867.2	3283.9	2606.4	631.3	53.5	42.5	57.2
40°	4915.6	4924.9	4843.6	4526.1	3963.1	3348.5	2663.6	601.8	44.3	38.8	55.4
42.5°	4806.7	4830.7	4825.2	4574.1	4003.8	3352.2	2639.6	542.7	35.1	35.1	53.5
45°	4714.4	4738.4	4771.7	4553.8	3976.1	3304.2	2564.0	463.3	25.8	33.2	53.5
47.5°	4546.5	4572.3	4620.3	4391.4	3835.8	3180.5	2427.4	376.6	18.5	31.4	51.7
50°	4278.8	4291.7	4278.8	4022.2	3566.3	2981.1	2205.9	293.5	12.9	29.5	51.7
52.5°	4003.8	3977.9	3870.9	3546.0	3138.0	2665.5	1927.1	208.6	9.2	27.7	49.8
55°	3245.1	3204.5	3125.1	2925.8	2693.2	2277.8	1557.9	116.3	9.2	27.7	48.0
57.5°	2261.2	2283.4	2311.1	2270.5	2163.4	1794.2	1183.2	51.7	9.2	25.8	48.0
60°	1901.3	1882.8	1884.7	1858.8	1681.6	1308.7	814.0	20.3	9.2	24.0	46.1
62.5°	1135.2	1148.1	1172.1	1177.7	1002.3	731.0	426.4	9.2	9.2	22.2	44.3
65°	426.4	446.7	391.3	339.6	269.5	197.5	99.7	7.4	11.1	20.3	40.6
67.5°	12.9	14.8	18.5	16.6	16.6	14.8	11.1	7.4	11.1	18.5	38.8
70°	9.2	9.2	9.2	9.2	9.2	7.4	7.4	7.4	9.2	16.6	35.1
72.5°	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	9.2	14.8	31.4
75°	5.5	7.4	5.5	5.5	5.5	5.5	5.5	5.5	9.2	12.9	25.8
77.5°	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	7.4	11.1	22.2
80°	3.7	3.7	3.7	3.7	3.7	3.7	3.7	5.5	7.4	9.2	18.5
82.5°	3.7	3.7	3.7	1.8	3.7	3.7	3.7	3.7	7.4	7.4	14.8
85°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	3.7	5.5	7.4	9.2
87.5°	0.0	0.0	0.0	0.0	1.8	1.8	1.8	3.7	5.5	5.5	5.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	129.2	129.2	129.2
2.5°	121.8	121.8	121.8
5°	118.1	118.1	118.1
7.5°	114.4	114.4	114.4
10°	110.8	110.8	110.8
12.5°	107.1	107.1	108.9
15°	101.5	105.2	105.2
17.5°	97.8	101.5	103.4
20°	94.1	97.8	99.7
22.5°	88.6	94.1	97.8
25°	84.9	92.3	94.1
27.5°	81.2	90.4	94.1
30°	79.4	88.6	92.3
32.5°	75.7	86.8	90.4
35°	73.8	86.8	90.4
37.5°	73.8	84.9	90.4
40°	72.0	84.9	90.4
42.5°	72.0	84.9	90.4
45°	72.0	84.9	90.4
47.5°	70.1	84.9	92.3
50°	70.1	86.8	92.3
52.5°	70.1	86.8	92.3
55°	70.1	86.8	90.4
57.5°	68.3	84.9	90.4
60°	68.3	84.9	90.4
62.5°	64.6	83.1	88.6
65°	62.8	81.2	86.8
67.5°	59.1	79.4	83.1
70°	55.4	73.8	79.4
72.5°	49.8	70.1	75.7
75°	44.3	64.6	68.3
77.5°	38.8	57.2	60.9
80°	31.4	48.0	51.7
82.5°	24.0	36.9	38.8
85°	16.6	24.0	25.8
87.5°	7.4	11.1	12.9
90°	0.0	0.0	0.0

(END OF REPORT)